

Case Report

POST-OP SQUAMOUS CELL CERVICAL CARCINOMA WITH SCAR SITE METASTASIS-DRAMATIC HEALING WITH EFFECTIVE PALLIATIVE THERAPY

¹* Shwetima Chaudhary and ² Vinay Sagar

¹Department of Radiation Oncology, King Georges Medical University, Lucknow, India

²Department of Internal Medicine, Max Super-speciality Hospital, Dehradun, India

Received 18th September 2020; Accepted 16th October 2020; Published online 13th November 2020

ABSTRACT

Cervical malignancy is the second most common cancer in female according to GLOBOCON data 2018. Recurrences are usual after surgery in carcinoma cervix, if adjuvant treatments in the form of chemotherapy or radiation are not planned. Common sites of recurrences after surgery are the parametrium, lymph nodes and vagina. However, incisional skin metastases from carcinoma cervix are extremely rare; incidence ranges from 0.1 to 0.2 %. The present case is interesting to discuss because of the incisional skin site metastasis where the patient did not receive any adjuvant treatment following total abdominal hysterectomy and had complete wound resolution on palliative therapy.

Keywords: cervix, hysterectomy, recurrences, scar metastasis.

INTRODUCTION

Cervical carcinoma is second most common cause of female malignancy burden in India based on GLOBOCON data 2018.¹ Although, cervical cancer generally metastasize to para-metrium, lymphnode and vagina, very rarely reported spread to scar site of previous surgery. Various mechanisms have been proposed that result in spread to scar sites. Palliative chemo-radiation therapy has a role in improving survival to the limited extent, however patients have poor overall outcome. Here, we are discussing a case of total abdominal hysterectomy with bilateral salpingo-oophorectomy for 1B2 stage carcinoma of cervix and subsequent post-operative progression to scar metastasis.

CASE REPORT

A 52 Years old female registered in radiation oncology outpatient as case of carcinoma cervix with post-total abdominal hysterectomy performed at some other medical center. Her histopathology report consistent with keratinizing squamous cell carcinoma involving more than half of cervical wall thickness with tumor size 3.5x2x3 cm, firm, grey white and gross involvement of cervical lip with normal fallopian tube and para-metrium. On clinical examination she had a growth of 2x3cm at the vault region with mild bleeding. Visible large ulcer at the scar site of previous total abdominal hysterectomy, which measured 4x3 cm and 2 cm deep from the surface with blood ooze and the presence of granulation tissue. Full metastatic work up was performed and a biopsy from the scar site suggested metastatic squamous cell carcinoma. Palliative management was planned, as the disease was metastatic which included palliative chemotherapy, radiation and best supportive care. The chemotherapy consisted of six cycles of carboplatin and paclitaxel every three weeks along with wound dressing, antibiotics and 20 Gray palliative radiations in five fractions to whole pelvis by conventional technique. Assessment was done after every cycle of chemotherapy. She underwent MRI brain with contrast to exclude any brain metastasis and was unremarkable.

After completion of 6 cycles of chemotherapy she was again assessed for the control of disease and the symptoms. The ulcerated wound over scar site reduced in size and eventually disappeared. However, unfortunately she developed rectovaginal fistula, which was confirmed with MRI pelvis, in due course of disease with suspicion of disease progression. She underwent diversion colostomy and advised for proper colostomy care and dressing. As the disease was progressive we planned for second line chemotherapy in light of unsatisfactory response to previous chemotherapy and subsequent progression. Her general condition did not allow us for second line chemotherapy, thus the decision was deferred. She was later counseled regarding supportive care, nutrition and pain management.



*Corresponding Author: Shwetima Chaudhary

Department of Radiation Oncology, King Georges Medical University, Lucknow, India

DISCUSSION

Cutaneous metastasis is often a feature of breast, lung, ovary, and colon cancers. Metastatic carcinoma to anterior abdominal wall incision has been a frequent finding with primary focus in colon, kidneys and bladder.² Carcinoma cervix commonly metastasizes to parametrium, lymphnodes and vagina.³ Very rarely it spreads to surgical scar site and that accounts to 0.1 to 0.2% of cases.⁴ Adenocarcinoma and undifferentiated cervical malignancy are the predominant histo-pathologic varieties that have predilection to cutaneous dissemination, squamous cell carcinoma amounts to very scarce.⁴ According to one study incidence of skin metastasis of squamous cell cervical carcinoma is 0.9% where as adenocarcinoma is 5.8%.⁷ Various authors have enumerated possible mechanisms of scar recurrences, including the interplay of minimally microscopic residual occult cancer with the surgical wound inside a developmentally defined tissue, tumor implantation of malignancy at the time of surgery, or retrograde spread of tumor secondary to the lymphatic obstruction.^{5,6,7} Some have postulated combination of “seed and soil theory” and inflammatory oncotaxis methods of infiltration and growth of tumor cells at distant surgical sites. Thus, creating an environment favorable to nurture the iatrogenically deposited and circulating cervical tumor cells at operative wound.⁸ The interaction of occult tumor cells and surgical wounds may happen locally at the site of tumor resection as well as at distant remote location from it at the sites of surgical access to the body cavities or compartments. Recurrences in microscopically free margins occur locally at the site of surgical resection in up to 50 %, whereas at distant surgical scar are documented in only 1–2 %.⁹ Assumptions have evolved that most of the wound-associated tumor-promoting effects are related to the wound size and to the extent of ischemia within a wound. Indicators associated greater risk of disease recurrence are high FIGO stage, dissemination to parametrium, positive resection margins, and tumor size more than 4cm.⁸ Distant metastasis is predominantly sighted in the presence of positive lymph node at primary diagnosis.¹⁰ In our patient there was no involvement of draining lymph nodes radiologically, however the resected margins were microscopically positive for tumor cells with FIGO classification stage 1B2. These scar site metastasis have been reported in different modalities of surgeries including laparotomy, laparoscopic (at port sites) and robot-assisted radical hysterectomies.¹¹ Studies have clarified median time to recurrence was 14 months (range 1.5 month to 45 months) which encompasses all histopathological subclasses.¹² However, another study that included majority of squamous cell cervical carcinoma, calculated median time of recurrence 5 months (range 1.5 to 19 months).¹³ In our patient, recurrence from the time of surgery was 5 months with concomitant local vault recurrence and eventual progression to recto-vaginal fistula. Unfortunately, similar to distant metastasis, the prognosis is typically dismal as surgical scar metastasis occurs in the background of distant or local recurrence. In index case, local recurrence was clearly evident without distant spread. Median survival of these patients after diagnosis ranges from 8.5 months to 1 year.^{7,13}

Our patient survived till 1 year from the time of recurrence and received palliative platinum based chemotherapy and radiotherapy with complete disappearance of scar site metastasis. However, she succumbed to her illness due to advancement in her local disease. To conclude, scar site metastasis is rarity particularly of squamous variety as compared to adenocarcinoma of cervical cancer. It occurs commonly in concurrence with distant or local disease progression. Platinum based palliative chemotherapy and radiotherapy are the therapeutic options to contain disease to some extent.

REFERENCES

1. <https://gco.iarc.fr/today/data/factsheets/populations/356-india-fact-sheets.pdf>
2. Copas PR, Spann CO, Thomas WW, et al. Squamous cell carcinoma of the cervix metastatic to a drain site. *Gynecol Oncol.* 1995;56:102–104.
3. Kim WJ, Park HJ, Kim HS, et al. Vulvar metastasis from squamous cell carcinoma of the cervix clinically presenting as lymphangiomas. *Ann Dermatol.* 2011;23:64–67.
4. Srivastava K, Singh S, Srivastava M, et al. Incisional skin metastasis of a squamous cell carcinoma 3.5 years after radical treatment—a case report. *Int J Gynecol Cancer.* 2005;15:1183–1186.
5. Selo-Ojeme DO, Bhide M, Agrawal VP. Skin incision recurrence of adenocarcinoma of the cervix five years after radical surgery for stage IA disease. *Int J Clin Pract.* 1998;52:519.
6. Malfetano JH. Skin metastasis from cervical cancer. A fatal event. *Gynecol Oncol.* 1986;24:177–182.
7. Imachi M, Tsukamoto N, Kinoshita S, et al. Skin metastasis from carcinoma of the uterine cervix. *Gynecol Oncol.* 1993;48:349–354.
8. Van den Tillaart SA, Schoneveld A, Peters IT, et al. Abdominal Scar Recurrences of Cervical Cancer: Incidence and Characteristics: A Case-Control Study. *Int J Gynecol Cancer.* 2010;20:1031-1040.
9. Höckel M, Dornhöfer N. The hydra phenomenon of cancer: why tumors recur locally after microscopically complete resection. *Cancer Res.* 2005;65:2997–3002.
10. Sartori E, Pasinetti B, Carrara L, et al. Pattern of failure and value of follow-up procedures in endometrial and cervical cancer patients. *Gynecol Oncol.* 2007;107 (Suppl 1):S241.
11. Martinez A, Querleu D, Leblanc E, et al. Low incidence of port-site metastases after laparoscopic staging of uterine cancer. *Gynecologic Oncology.* 2010;118:145–150.
12. Iavazzo C, Madhuri K, Tailor A, et al. Incisional site metastasis in a patient with cervical carcinoma: a case report and review of the literature. *Case Rep Obstet Gynecol.* 2012;2012:593732.
13. Ramirez PT, Frumovitz M, Wolf JK, et al. Laparoscopic port-site metastases in patients with gynecological malignancies. *International Journal of Gynecological Cancer.* 2004;14:1070–1077.
